

REMARKS

Claims 1-5, 8-9 and 11-24 remain pending in the application, with claims 1, 8, 14 and 21 being the independent claims. Independent claims 1, 8, 14 and 21 are sought to be amended. Entry and consideration of this Amendment is respectfully requested. No new matter is believed to have been introduced by this Amendment.

Applicant has made the above Amendment to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Based on the above Amendment and the following Remarks, Applicant respectfully requests that the Examiner reconsider and withdraw all outstanding rejections.

Rejections under 35 U.S.C. § 103(a)

Claims 1-5, 8, 9 and 11-24 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 6,313,838 B1 (hereinafter referred to as "Deering"), in view of U.S. Patent Appl. No. 2003/0233592 A1 (hereinafter referred to as "Lin") and further in view of U.S. Patent No. 7,256,788 (hereinafter referred to as "Luu"). Applicant respectfully traverses these rejections with respect to pending claims 1-5, 8, 9 and 11-24 for at least the following reason.

Independent claims 1, 8, 14 and 21 have been amended to include a similar feature as follows: wherein the first processor, on average, is operated at a lower clock frequency when performing a sequence of graphics tasks (claim 1); wherein the CPU, on average, is operated at a lower clock frequency when performing a sequence of graphics tasks (claims 8 and 14);

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and wherein the processor, on average, is operated at a lower clock frequency when performing a sequence of graphics tasks (claim 21). Support for the Amendment can be found in the specification at least in paragraph 0027.

The claimed feature of wherein the CPU (or processor), on average, is operated at a lower clock frequency when performing a sequence of graphics tasks is at least partly due to the claimed interrupt signaling feature also recited in claims 1, 8, 14 and 21. Lin, Deering and Luu, either taken alone or in combination, do not teach or suggest this claimed feature.

For example, Lin discusses a power saving method for computer graphics systems. First, a first time period from the start of a frame to the end of the frame is obtained. Next, the first time period is compared with a default frame time of the computer graphics system. Finally, the computer graphics system is disabled between the end of the first time period and the end of the default frame time when the first time period is shorter than the default frame time. (See, e.g., Lin, Abstract).

Deering discusses a method for estimating rendering times for three-dimensional graphics objects and scenes. The rendering times may be estimated in real-time, thus allowing a graphics system to alter rendering parameters (such as level of detail and number of samples per pixel) to maintain a predetermined minimum frame rate. Part of the estimation may be performed offline to reduce the time required to perform the final estimation. The method may also detect whether the objects being rendered are pixel fill limited or polygon overhead limited. (See, e.g., Deering, Abstract).

Luu discusses a graphics power management method loads a first set of graphics

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commands from a CPU into a GPU at the beginning of a frame cycle. The CPU is put into a power saving mode after the loading is complete. The GPU processes the commands and forwards the results to a graphics buffer. The display begins the presentation of the data at the beginning of the following refresh cycle. The CPU leaves the power savings mode at end of the frame cycle to begin loading a second set of commands. The CPU recognizes the end of the frame cycle by counting a predetermined number of frame flip interrupt requests. After the CPU counts the predetermined number of frame flip interrupt requests the CPU begins to communicate additional graphics commands and then returns to the power savings mode. (See, e.g., Luu, Abstract).

Lin, Deering and Luu, either taken alone or in combination, do not teach or suggest the claimed feature of wherein the CPU, on average, is operated at a lower clock frequency when performing a sequence of graphics tasks. For at least this reason, independent claims 1, 8, 14 and 21 and their respective dependent claims 2-5, 9, 11-13, 15-20 and 22-24 are distinguishable from Lin, Deering and Luu, either taken alone or in combination. Accordingly, Applicant respectfully requests that the rejections to these claims under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Applicant does not otherwise concede the correctness of the Office Action's rejection with respect to any of the dependent claims discussed above. Accordingly, Applicant hereby reserves the right to make additional arguments as may be necessary to further distinguish the dependent claims from the cited references, taken alone or in combination, based on additional features contained in the dependent claims that were not discussed above. A detailed discussion of these differences is believed to be unnecessary at this time in view of

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the basic differences in the independent claims pointed out above.

INVITATION FOR A TELEPHONE INTERVIEW

The Examiner is invited to call the undersigned, Molly A. McCall, at (703) 633-0931 if there remains any issue with allowance of the case.

CONCLUSION

Applicant respectfully submits that all of the stated grounds of rejection have been properly traversed accommodated or rendered moot. Thus, Applicant believes that the present application is in condition for allowance, and as such, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections, and allowance of this application.

Respectfully submitted,

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/Molly A. McCall/ Reg. No. 46,126
Molly A. McCall
Intel Corporation
c/o CPA Global
P.O. Box 52050
Minneapolis, MN 55402